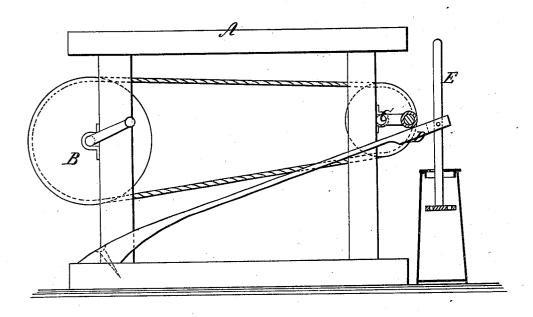
## W. I. M. Fadden,

Chilli.

No. 87.185°,

Patented Feb. 23.1869.



Witnesses; Chas Nida Vm a Morgan Inventor;
W.D.M. Tadden

pa Munifl
Attorneys



## W. D. McFADDEN, OF SENATOBIA, MISSISSIPPI.

Letters Patent No. 87,185, dated February 23, 1869.

## IMPROVEMENT IN CHURNS

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, W. D. MCFADDEN, of Senatobia, in the county of De Soto, and State of Mississippi, have invented a new and improved Churn; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification.

This invention relates to an improved method of operating a vertically-reciprocating churn-dasher, from a rotating driving-mechanism, whereby a simplified ar-

rangement of mechanism is provided.

The accompanying drawing represents a sectional elevation of a churn, and a side elevation of the mech-

anism for operating the dasher.

The common method of operating such churns from a rotary driving-mechanism, necessitates the employment of a sliding cross-head, guides for the same, and connecting-rods, occupying considerable space in a vertical direction, and requiring, for smooth and easy working, to be accurately constructed, involving considerable expense.

By my arrangement, a small and simple frame, A, is provided, by the side of which a person may sit comfortably to turn the crank of the driving-wheel B, to operate the crank-shaft C by a belt or otherwise, the wrist-pin of which may be provided with a friction-

wheel, and is arranged to operate the free end of the spring D, in the downward direction, the other end being secured to the base of the frame in a manner to cause the said free end to be restored by its elasticity when the crank-pin rises. To the said free end the churn-dasher E is attached, and thereby derives reciprocating motion.

If it be not desired to give a rapid motion to the dasher, the secondary wheel and belt may be dispensed with, and the crank-shaft or wrist-pin applied to the wheel B, and the spring similarly arranged with ref-

erence to that wheel.

This arrangement of operating-mechanism, admits of a simple and cheap construction of all the parts, whereby a vertically-reciprocating dasher may be operated from a rotary driving-mechanism.

Having thus described my invention,

I claim as new, and desire to secure by Letters Patent—

The combination of the spring D, crank-shaft C, dasher E, and driving-wheels, when arranged to operate in the manner described, for the purpose specified.

The above specification of my invention signed by me, this day of , 1868.

W. D. McFADDEN.

Witnesses:

J. W. Youngblood, D. H. A. Sanders.